

# **ZRC**<sup>®</sup> Cold Galvanizing Repair Compound

The original Cold Galvanizing Compound! Providing superior zinc coating protection for over 50 years!

# Enjoy the following great benefits with ZRC Cold Galvanizing Compound:

- 95% zinc in the dry film using only Type III "ultra pure" ASTM-D-520 zinc
- Meets and exceeds Fed. Spec. DOD-P-21035A (Galvanizing Repair Spec);
   MIL-P-26915A (USAF Zinc Dust Primer); ASTM Des. A-780 (Standard Practice for Repair of Damaged Hot-Dip Galvanized Coatings; SSPC-Paint 20 (Specification for Zinc-Rich Primer)
- Passes 3,000 hours salt spray testing without failure (ASTM Des. B117)
- Passes Preece Test (ASTM Des. A239) for hot-dip galvanizing
- Passes 9-year subtropical testing
- Low VOC approved in all 50 states
- ISO 9001 registration assures the highest quality consistently

For specification assistance, application assistance, test reports and product selection please contact our customer support at (800) 831-3275 or our website www.zrcworldwide.com.

# THE ZRC DIFFERENCE

The ZRC difference is made possible by ZRC's high zinc content (95% by weight in the dried film) of "ultra pure" (ASTM D 520 Type III) zinc dust, ensuring that more metallic zinc is available for superior galvanic protection against corrosion. This high purity zinc dust is compounded with a tenacious non-encapsulating binder using a highly controlled trade secret process in our state-of-the-art manufacturing facility.

The result is a self-healing galvanic film that does not require sand-blasting for most applications, providing both up-front labor savings and extended longevity of corrosion protection. We offer a Certificate of Compliance to these exacting material standards and a copy of our most recent ISO Registration Certificate.

### The Proof is in the Photos

These scanning electron microscope photos illustrate the difference between the true galvanic protection of ZRC and a competitor's low percentage zinc coating.



# **APPLICATIONS**

Field applied galvanizing Repairing hot-dip galvanizing Rust proofing welds Repairing inorganic zinc Re-galvanizing of worn hot-dip Metal fabrication Construction Manufacturing/0EM **Antenna Towers** Petrochemical Plants Roads & Bridges Tanks Industrial Maintenance Water Treatment Marine & Offshore Cooling Towers Hundreds more!

#### TESTING & SPECIFICATION CONFORMANCE DATA

- Meets and exceeds Fed. Spec. DOD-P-21035A, formerly MIL-P-21035 (Galvanizing Repair Spec.)
- Meets and exceeds Fed. Spec. MIL-P-26915A (USAD Zinc Dust Primer)
- Passes 3,000 hours salt spray testing without failure\*\*
   (ASTM Des. B117)
- Passes Preece Test (ASTM Des. A239) for hot-dip galvanizing
- Resists intermittent dry-heat temperatures up to 750°F
- Meets and exceeds ASTM Des. A-780 (Standard Practice for Repair of Damaged Hot-Dip Galvanized Coatings)
- Meets and exceeds SSPC-Paint 20 (Specification for Zinc-Rich Primer), Type II (organic), Level I, Type III zinc dust

#### AVAILABILITY/COST

Immediately available off the shelf, ZRC Cold Galvanizing Compound is offered directly from the manufacturer, or through a worldwide distribution network. The initial cost of ZRC is more than offset by substantial maintenance savings and the increased service life of protected surfaces. Contact ZRC Worldwide for current pricing and further information.

#### MATERIALS/FINISHES

A unique formulation of 95% pure zinc metal as a liquid coating, ZRC Cold Galvanizing Compound is manufactured to exacting standards in our own state-of-the-art manufacturing facility.

#### SUGGESTED SPECIFICATION

Organic Zinc-Rich coating containing 95% metallic zinc, by weight in the dried film; as manufactured by ZRC Worldwide, Marshfield, MA (www.zrcworldwide.com) or other facility having been registered to the International Organization for Standardization ISO 9001 standard for quality.

For areas and industries with more stringent VOC restrictions specify 7BC 221



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| Technical Data                      |   |  |  |  |  |
|-------------------------------------|---|--|--|--|--|
| ТҮРЕ                                | Single pack, premixed, ready to apply,<br>liquid organic zinc compound        |  |  |  |  |
| THEORETICAL COVERAGE                | 400 ft²/gal @ 1.5 mil dry film thickness                                      |  |  |  |  |
| METALLIC ZINC CONTENT               | 95% by weight in dry film   |  |  |  |  |
| FLASH POINT                         | 111°F (44°C) (SETA method, ASTM D3278)  |  |  |  |  |
| VOC CONTENT                         | 3.3 lbs/gal (385 gms/ltr) (ASTM D3960)  |  |  |  |  |
| WEIGHT PER GALLON                   | 24 lbs. (ASTM D1475)  |  |  |  |  |
| SOLIDS CONTENT                      | 86% (by weight)/52% (by volume)   |  |  |  |  |
| VISCOSITY                           | 1900 cps. Brookfield spindle #5 @ 100 RPM, @ 25°C                             |  |  |  |  |
| MAXIMUM SERVICE TEMP - Intermittent | 750°F (399)°C   |  |  |  |  |
| MAXIMUM SERVICE TEMP - Constant     | 350°F (177)°C   |  |  |  |  |
| ELECTRICAL CONDUCTIVITY             | 73 million ohms per square @ 3 mils dry (resistivity)                         |  |  |  |  |
| IMPACT RESISTANCE                   | Greater than 30 inch-lbs. (extrusion) per ASTM-D2794                          |  |  |  |  |
| ABRASION RESISTANCE                 | 11.5 liters per dry mil (tested @ 3 dry mils) per ASTM-D98-51                 |  |  |  |  |
| POT LIFE                            | At least 24 hrs.  |  |  |  |  |
| PACKAGING                           | 3.5 gallon pails, gallon, quart, half-pint and aerosol cans                   |  |  |  |  |
| DRY TIME                            | Set to touch. When ambient air dried, 20-30 min.<br>@ 1.5 mil (38μ) thickness |  |  |  |  |
| RECOAT TIME                         | (Second Coat) 12 hrs.   |  |  |  |  |

TOPCOATING

After 24-48 hrs., topcoat with acrylic, epoxy, urethane or vinyl type products. DO NOT USE alkyd, alkyd-modified acrylic, or lacquer type products. Consult our Guide to Topcoating for detailed instructions.

# **Surface Preparation**

Dependant upon surface condition and intended service. Typical examples include:

| GREASE & OILS   | Solvent clean to SSPC-SP1                          |
|-----------------|--|
| RUST SCALE      | Power tool clean to SSPC-SP3 or SSPC-SP1           |
| MILL SCALE      | Sandblast to SSPC-SP6 (commercial                  |
| WATER IMMERSION | (100°F maximum) Sandblast to SSPC-SP10 (near-white |

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BRUSH/ROLLER/AEROSOL Apply as received in container. For Brush Application, use 100% Natural 100% Chinese bristle brushes. For Roller Application,

Natural 100% Chinese bristle brushes. For Roller Application, use 3/8" nap rollers, made of mohair or lambs wool (sheepskin).

#### SPRAY (low pressure compressor type)

Atomized air pressure  $50 \text{ lbs/in}^2 = 3.5 \text{ kg/cm}^2$  Fluid pressure  $15\text{-}20 \text{ lbs/in}^2 = 1.1\text{-}1.4 \text{ kg/cm}^2$  Orifice of tip 0.080 inches (0.20 cm)

Viscosity reduction 4:1 ZRC:Mineral Spirits -OR- 16:1 ZRC:Xylene

## SPRAY (airless type)

 Pump
 30:1

 Hose
 1/2" (1.3 cm) (I.D.)

 Orifice of tip
 60°-0.026 inches (0.07 cm)

 Type of tip
 Tungsten carbide, reversing

 Filter screens
 Complete removal is recommended.

 However, if screens are employed, use no less than 30 mesh.

Viscosity No reduction required

Recommended procedure

Connect hose directly to pump, without filter assembly, ensuring a hose length of 50 ft. max. Use in-pot agitator or

continuous recycling. Use least pressure possible. Start at 1500 lbs/in² = 105 kg/cm² and increase

as required for good spraying.

CLEAN UP Mineral spirits solvent or Xylene



ZRC Worldwide has been registered to the International Organization for Standardization ISO 9000 Series Standards for Quality. The fact that ZRC is registered to ISO 9001 assures our customers that the zinc-rich coatings manufactured in our facility are designed and manufactured according to the most stringent quality control standards, so you can rely on their consistency.

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<sup>\*\*</sup> Copy of reports available upon request